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MEMORANDUM

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FROM: Steven M. Olea  
Director  
Utilities Division*EA for SMD*

2014 JAN 23 P 4: 23

AZ CORP COMMISSION  
DOCKET CONTROL

DATE: January 23, 2014

**ORIGINAL**RE: STAFF REPORT FOR SUNRISE WATER COMPANY'S APPLICATION FOR  
FINANCING AUTHORIZATION. (DOCKET NO. W-02069A-13-0261)

Attached is the Staff Report for Sunrise Water Company's application requesting authorization to incur long term debt from the Water Infrastructure Finance Authority of Arizona in an amount of \$755,000 ("Financing Application"). Staff recommends authorization of the financing application with conditions.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before February 3, 2014.

SMO:TBH:red

Originator: Teresa B. Hunsaker

Arizona Corporation Commission

**DOCKETED**

JAN 23 2014

DOCKETED BY

Service List for: Sunrise Water Company  
Docket No. W-02069A-13-0261

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**STAFF REPORT  
UTILITIES DIVISION  
ARIZONA CORPORATION COMMISSION**

**SUNRISE WATER COMPANY  
DOCKET NO. W-02069A-13-0261**

**APPLICATION FOR FINANCING AUTHORIZATION**

**JANUARY 23, 2014**

## STAFF ACKNOWLEDGMENT

The Staff Report for Sunrise Water Company Docket No. W-02069A-13-0261, is the responsibility of the Staff members listed below. Teresa B. Hunsaker is responsible for the financial analysis. Michael Thompson is responsible for the engineering review.



Teresa B. Hunsaker  
Public Utilities Analyst II



Michael Thompson  
Water/Wastewater Engineer

**EXECUTIVE SUMMARY  
SUNRISE WATER COMPANY  
DOCKET NO. W-02069A-13-0261**

On July 31, 2013, Sunrise Water Company, ("Sunrise" or "Company") filed an application for the authorization of financing with the Arizona Corporation Commission ("Commission") for a Water Infrastructure Finance Authority of Arizona ("WIFA") loan. On June 19, 2013, Sunrise filed an application with WIFA for a \$755,000, 20-year amortizing loan to finance the construction of planned improvements.

Sunrise is a for-profit Arizona subchapter S-Corporation with only one shareholder and a Class B Arizona public service corporation that provides water utility service for approximately 1,450 customers. The Company's service area is approximately 3.9 square miles located in northern Peoria, Arizona, in Maricopa County.

The Company requests authorization to issue debt in an amount not to exceed \$755,000 in the form of a 20-year amortizing loan at a rate not to exceed 6.5 percent per annum. The terms of the anticipated loan provide for encumbrance of all the Company's assets and revenues. The Company proposes to use the proceeds of the debt financing for the following purposes:

- Construct improvements of new facilities at an existing well, including arsenic treatment with two vessel absorptive media;
- Replacement of five small booster pumps with two larger booster pumps equipped with variable frequency drive; and
- Installation of a 250,000 gallon storage tank and electrical equipment.

Staff recommends that the Commission approve the Company's request for authorization of the loan to fund the construction of planned improvements. Staff further concludes that issuance of the proposed debt financing for the purposes stated within the financing application is compatible with the public interest, should not impair its ability to provide services and is generally consistent with sound financial practices. However, no "used and useful" determination of the proposed plant was made, and no particular future treatment should be inferred for rate making or rate base purposes.

Staff recommends:

- Granting authorization to incur a 20-year amortizing loan in an amount not to exceed \$755,000 pursuant to a loan agreement with WIFA and at an interest rate not to exceed that available from WIFA.
- Authorizing the Company to pledge its assets in the State of Arizona pursuant to Arizona Revised Statutes § 40-285 and A.A.C. R18-15-104 in connection with the WIFA loan.

- Directing the Company to file as a compliance item in this Docket, within 60 days of the execution of any financing transaction authorized herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- Directing the Company to provide to the Utilities Division, upon Staff request, a copy of any WIFA loan documents executed pursuant to the authorizations granted herein.
- Establishing an expiration date for any unused authorization to incur debt granted in this proceeding at December 31, 2016.
- Directing the Company to file its next general rate case no later than June 30, 2017, using a test year ending December 31, 2016.
- Authorizing the Company to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.
- Directing the Company to file with Docket Control, as a compliance item in this docket, by June 30, 2016, a copy of the Maricopa County Environmental Services Department Certificate of Approval of Construction for the Well No. 2 and Well No. 4 site improvements.
- Directing the Company to continue to undertake detailed cash flow forecasts relative to the use of Advances in Aid of Construction and Contributions in Aid of Construction and to provide the results of this analysis to Staff on an annual basis. Such analysis should be provided on or before June 1<sup>st</sup> of each year until further ordered by the Commission.
- Directing the Company to file with Docket Control, no later than June 30, 2014, twelve (12) months of actual use water use data. If the reported water loss is greater than 10 percent, the Company should prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, the Company should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, should be docketed as a compliance item no later than August 31, 2014.

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## **INTRODUCTION**

On July 31, 2013, Sunrise Water Company, ("Sunrise" or "Company") filed an application for the authorization of financing with the Arizona Corporation Commission ("Commission") for a Water Infrastructure Finance Authority of Arizona ("WIFA") loan. The Company is requesting authorization to issue debt and pledge its assets and revenue as security. On June 19, 2013, Sunrise filed an application with WIFA for a \$755,000, 20-year amortizing loan to finance the construction of planned improvements to Well No. 2 and Well No. 4 booster pump station sites. The WIFA Board of Directors added Sunrise's proposed well-improvement project to its Drinking Water Project Priority List. Sunrise's WIFA project number is 013-2014.

## **PUBLIC NOTICE**

The Company provided a copy of the public notice that the Company intends to publish upon instruction from a subsequent Procedural Order.

## **BACKGROUND**

Sunrise is a for-profit Arizona subchapter S-Corporation with only one shareholder and a Class B Arizona public service corporation that provides water utility service for approximately 1,450 customers. The Company's service area is approximately 3.9 square miles located in northern Peoria, Arizona, in Maricopa County. Sunrise's Certificate of Convenience and Necessity was granted in Commission Decision No. 40017, dated May 19, 1969. The current rates were established in Decision No. 71455 dated December 23, 2009. The Company's previous rates were established in Decision No. 53721 dated August 31, 1983.

## **COMPLIANCE**

The Corporations Division reports the Company is in Good Standing. A search of the Consumer Services database from January 1, 2010 to January 7, 2014, indicates that there are currently no complaints.

## **PURPOSE AND DESCRIPTION OF THE REQUESTED FINANCING**

The Company proposes to use the proceeds of the debt financing for the following purposes:

- Construct improvements of new facilities at an existing well, including arsenic treatment with two vessel absorptive media;
- Replacement of five small booster pumps with two larger booster pumps equipped with variable frequency drive; and
- Installation of a 250,000 gallon storage tank and electrical equipment.



The well improvements project would allow the Company to increase water supplies to satisfy expected customer growth, while complying with new Environmental Protection Agency arsenic requirements.

## **ENGINEERING ANALYSIS**

The Staff Engineering Memorandum is attached. Staff reviewed the Company's proposed well improvement and concluded that Sunrise's cost estimates for the proposed well site improvements to be financed, totaling \$755,000, appear to be reasonable and their associated plant additions appropriate. However, no "used and useful" determination of the proposed plant was made, and no particular future treatment should be inferred for rate making or rate base purposes.

## **FINANCIAL ANALYSIS**

Staff's analysis is presented in Schedule TBH-1. Column [A] of the schedule reflects the Company's revised historical financial information for the year ended December 31, 2012, and Column [B] presents pro forma financial information that modifies Column [A] to reflect issuance of a \$755,000, 20-year amortizing loan at 4.5 percent per annum. Column [C] presents pro forma financial information that modifies Column [A] to reflect issuance of a \$755,000, 20-year amortizing loan at 6.5 percent per annum. Schedule TBH-2 provided Income Statements utilized for selected financial information. Schedule TBH-2 Column [A] reflects the 2012 Income Statement provided with the Annual Report to the Commission and Column [B] reflects the Company Revised 2012 Income Statements. Schedule TBH-3 is the Loan Amortization Schedule for a 20-year loan at 4.5 percent per annum. Schedule TBH-4 is the Loan Amortization Schedule for a 20-year loan at 6.5 percent per annum.

### *Debt Service Coverage*

Debt service coverage ("DSC") ratio represents the number of times internally generated cash will cover required principal and interest payments on short-term and long-term debt. A DSC greater than 1.0 indicates that cash flow from operations is sufficient to cover debt obligations. A DSC less than 1.0 means that debt service obligations cannot be met by cash generated from operations and that another source of funds is needed to avoid default.

On Schedule TBH-1, a pro forma 7.10 DSC results for the scenario described above for Column [B] Line 13, and a pro forma 6.02 DSC results for the scenario described above for Column [C] Line 13. The DSC from both scenarios shows that cash flow from operations is sufficient to cover debt service. The Company has no existing unused authorizations to issue indebtedness.

### *Income Statement*

Schedule TBH-2 provided the selected financial information from Column [A] the 2012 Annual Report Income Statement and the Revised Income Statement in Column [B] reflects adjustments through revisions provided by Ray L. Jones, Consultant. The Revised Income Statements were provided through data requests on October 21, 2013 and January 2, 2014. The overall impact to corrections is \$39,351, a swing from a net loss of \$23,474 to a net profit of \$15,877.

#### *Capital Structure*

As of December 31, 2012, Sunrise's capital structure consisted on \$143,097 of short-term debt, \$0 of long-term debt, and \$161,324 of equity (TBH-1, Column [A], lines 18-22). Staff calculated a pro forma capital structure for the scenario described above for Column [B], which represents issuance of the proposed loan, and it is composed of \$23,831 of short-term debt, \$731,169 of long-term debt and \$161,324 of equity (TBH-1, Column [B], lines 18-22). Staff calculated a pro forma capital structure for the scenario described above for Column [C], which represents issuance of the proposed loan, and it is composed of \$19,034 of short-term debt, \$735,966 of long-term debt and \$161,324 of equity (TBH-1, Column [C], lines 18-22).

#### *Capital Structure (inclusive of AIAC and Net CIAC)*

As of December 31, 2012, Sunrise's capital structure inclusive of Advances in Aid of Construction ("AIAC") and Net Contributions in Aid of Construction ("CIAC"), consisted of \$143,097 of short-term debt, \$0 of long-term debt, \$161,324 of equity, AIAC of \$5,874,587 and Net CIAC of \$1,372,890 (TBH-1, Column [A], lines 29-37). The AIAC and CIAC Funding Ratio is 96.0 percent. Staff typically recommends that combined AIAC and Net CIAC funding not exceed 30 percent of total capital, inclusive of AIAC and Net CIAC for private and investor owned utilities.

Staff is concerned about the Company's continuing over-reliance on AIAC and CIAC. Refunds related to AIAC can place a significant burden on the utility's cash flow requirements. Managing the future funding of these refunds can become problematic when AIAC is relied upon heavily and new requests for service accelerate. While Sunrise has indicated that it did not receive any additional AIAC in years 2009 through 2012, the Company also indicated that subdivision development resumed during 2013 and it expects such development to continue. The level of CIAC on a utility's books can also impact available cash flows since the amortization of CIAC is recognized as a reduction to recoverable depreciation expense when setting rates.

Through the Company's response to Staff data requests issued in the instant docket, it appears that Sunrise's management is generally aware of the cash flow challenges that could surface due to its extensive previous and planned continued reliance on AIAC and CIAC. Staff believes that the Commission should direct Sunrise to continue to undertake detailed cash flow forecasts relative to the use of AIAC and CIAC and to provide the results of this analysis to Staff on an annual basis. Such analysis should be provided on or before June 1<sup>st</sup> of each year.

Staff will work with the Company to reach an agreement regarding the extent of the analysis and to reach an understanding as to the required reporting. These discussions will also allow Staff and the Company to reach a mutual understanding as to how the Company's management will use the results of this analysis in its future capital and operational financial planning. The annual analysis undertaken by Sunrise should also give specific consideration to the reasonableness of injecting investor-supplied funding into the Company's capital structure mix so as to increase the percentage of equity in its permanent capital structure. Staff believes the Company's routine financial analysis should provide a five year analysis. Staff recognizes that the Company's proposed loan with WIFA will reduce the current AIAC and CIAC Funding Ratio by approximately 9 percent and will provide more balance to the current capital structure. The pro forma capital structure scenarios provided below detail the financial impacts based on Company's proposed interest rate of 4.5 percent, not to exceed 6.5 percent per annum.

Staff calculated a pro forma capital structure for the scenario described above for Column [B], which represents issuance of the proposed loan at 4.5 percent per annum, and it is composed of \$23,831 of short-term debt, \$731,169 of long-term debt, \$161,324 of equity, AIAC of \$5,874,587 and Net CIAC of \$1,372,890 (TBH-1, Column [B], lines 29-37). The AIAC and CIAC Funding Ratio is 87.2 percent.

Staff calculated a pro forma capital structure for the scenario described above for Column [C], which represents issuance of the proposed loan at 6.5 percent per annum, and it is composed of \$19,034 of short-term debt, \$735,966 of long-term debt, \$161,324 of equity, AIAC of \$5,874,587 and Net CIAC of \$1,372,890 (TBH-1, Column [C], lines 29-37). The AIAC and CIAC Funding Ratio is 87.2 percent.

#### *Encumbrance*

A.A.C. R18-15-104 requires WIFA borrowers to pledge their revenue sources to repay the financial assistance. Arizona Revised Statutes ("A.R.S.") § 40-285 requires public service corporations to obtain Commission authorization to encumber certain utility assets. The statute serves to protect captive customers from a utility's act to dispose of any of its assets that are necessary for the provision of service. Thus, it serves to preempt any service impairment due to disposal of assets essential for providing service. Pledging assets as security typically provides benefits to the borrower in the way of increased access to capital funds or preferable interest rates, and it is often an unavoidable condition for procurement of funds for small or financially stressed entities. Staff recommends the authorization for the Company to issue debt and pledge its assets and revenue as security.

#### **STAFF RECOMMENDATIONS**

- Granting authorization to incur a 20-year amortizing loan in an amount not to exceed \$755,000 pursuant to a loan agreement with WIFA and at an interest rate not to exceed that available from WIFA.

- Authorizing the Company to pledge its assets in the State of Arizona pursuant to Arizona Revised Statutes § 40-285 and A.A.C. R18-15-104 in connection with the WIFA loan.
- Directing the Company to file as a compliance item in this Docket, within 60 days of the execution of any financing transaction authorized herein, a notice confirming that such execution has occurred and a certification by an authorized Company representative that the terms of the financing fully comply with the authorizations granted.
- Directing the Company to provide to the Utilities Division, upon Staff request, a copy of any WIFA loan documents executed pursuant to the authorizations granted herein.
- Establishing an expiration date for any unused authorization to incur debt granted in this proceeding at December 31, 2016.
- Directing the Company to file its next general rate case no later than June 30, 2017, using a test year ending December 31, 2016.
- Authorizing the Company to engage in any transaction and to execute any documents necessary to effectuate the authorizations granted.
- Directing the Company to file with Docket Control, as a compliance item in this docket, by June 30, 2016, a copy of the Maricopa County Environmental Services Department Certificate of Approval of Construction for the Well No. 2 and Well No. 4 site improvements.
- Directing the Company to continue to undertake detailed cash flow forecasts relative to the use of AIAC and CIAC and to provide the results of this analysis to Staff on an annual basis. Such analysis should be provided on or before June 1<sup>st</sup> of each year until further ordered by the Commission.
- Directing the Company to file with Docket Control, no later than June 30, 2014, twelve (12) months of actual use water use data. If the reported water loss is greater than 10 percent, the Company should prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If the Company believes it is not cost effective to reduce the water loss to less than 10 percent, the Company should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, should be docketed as a compliance item no later than August 31, 2014.

## FINANCIAL ANALYSIS

### Selected Financial Information

	[A] <sup>1</sup> <u>12/31/2012</u>		[B] <sup>2</sup> <u>Pro Forma</u>		[C] <sup>3</sup> <u>Pro Forma</u>	
1 Operating Income	\$	5,188	\$	5,188	\$	5,188
2 Depreciation & Amort.		401,667		401,667		401,667
3 Income Tax Expense		0		0		0
4						
5 Interest Expense		0		33,487		48,515
6 Repayment of Principal		0		23,831		19,034
7						
8						
9 <b>TIER</b>						
10 [1+3] ÷ [5]		N/A		0.15		0.11
11						
12 <b>DSC</b>						
13 [1+2+3] ÷ [5+6]		N/A		7.10		6.02
14						
15						
16 <b>Capital Structure</b>						
17						
18 Short-term Debt		143,097 47.0%		166,928 15.8% <sup>4</sup>		162,131 15.3% <sup>4</sup>
19 Long-term Debt		0 0.0%		731,169 69.0%		735,966 69.5%
20 Common Equity		161,324 53.0%		161,324 15.2%		161,324 15.2%
21						
22 Total Capital	\$	304,421 100.0%	\$	1,059,421 100.0%	\$	1,059,421 100.0%
23						
24						
25						
26						
27 <b>Capital Structure (inclusive of AIAC and Net CIAC)</b>						
28						
29 Short-term Debt		143,097 1.9%		166,928 2.0%		162,131 2.0%
30 Long-term Debt		0 0.0%		731,169 8.8%		735,966 8.9%
31 Common Equity		161,324 2.1%		161,324 1.9%		161,324 1.9%
32						
33 Advances in Aid of Construction ("AIAC")		5,874,587 77.8%		5,874,587 70.7%		5,874,587 70.7%
34						
35 Contributions in Aid of Construction ("CIAC") <sup>5</sup>		1,372,890 18.2%		1,372,890 16.5%		1,372,890 16.5%
36						
37 Total Capital (Inclusive of AIAC and CIAC)	\$	7,551,898 100.0%	\$	8,306,898 100.0%	\$	8,306,898 100.0%
38						
39						
40						
41						
42 <b>AIAC and CIAC Funding Ratio<sup>6</sup></b>		96.0%		87.2%		87.2%
43 (35+37)/(39)						
44						

<sup>1</sup> Column [A] is based on financial information for the year ended December 31, 2012. Financial Statements adjusted on October 21, 2013. Financial Statements revised on January 2, 2014. The Overall Impact due to corrections is \$39,351. New amounts reflect revisions provided on January 2, 2014. Per response provided by Ray L. Jones - Consultant. Schedule TBH-2.

<sup>2</sup> Column [B] is Column [A] modified to reflect issuance of the proposed \$755,000 debt financing amortized for 20 year term at 4.5 percent per annum. Schedule TBH-3

<sup>3</sup> Column [C] is Column [B] modified to reflect issuance of the proposed \$755,000 debt financing amortized for 20 year term at 6.5 percent per annum. Schedule TBH-4

<sup>4</sup> Pro Forma Short-term Debt represents the first year principal repayment on the proposed loan.

<sup>5</sup> Net CIAC balance (i.e. less: accumulated amortization of contributions).

<sup>6</sup> Staff typically recommends that combined AIAC and Net CIAC funding not exceed 30 percent of total capital, inclusive of AIAC and Net CIAC, for private and investor owned utilities.

**INCOME STATEMENTS AS OF DECEMBER 31, 2012**

	[A] 2012 Annual Report Income Statement	[B] Company Revised 2012 <sup>1</sup> Income Statement
<b>Revenues</b>		
Metered Water Revenues	\$ 1,413,289	\$ 1,414,789
Miscellaneous Service Revenue	-	12,439
Other Water Revenue	25,658	1,029
<b>Total Revenues</b>	<u>\$ 1,438,947</u>	<u>\$ 1,428,257</u>
<b>Operating Expenses</b>		
Salaries and Wages	389,251	389,251
Purchased Power	202,020	202,020
Chemicals	11,562	11,562
Repairs and Maintenance	20,720	21,941
Office Supplies Expense	44,163	82,078
Outside Services	38,613	28,170
Contractual Services - Testing	12,568	960
Rent - Building		51,504
Rent - Equipment		70
Transportation Expense	51,375	68,591
Insurance - General Liability	12,568	12,568
Insurance - Other	51,033	62,510
Regulatory Expense - Other	2,377	2,377
Miscellaneous Expense	151,310	32,574
Depreciation Expense	408,946	401,667
Property Taxes	55,226	55,226
<b>Total Operating Expenses</b>	<u>\$ 1,451,732</u>	<u>\$ 1,423,069</u>
<b>Operating Income</b>	<u>\$ (12,785)</u>	<u>\$ 5,188</u>
<b>Other Income (Expense)</b>		
Interest and Dividend Income	\$ 10,689	\$ 10,689
Non-Utility Income	-	-
Miscellaneous Non-Utility Expenses	-	-
Interest Expense	-	-
<b>Total Other Income (Expense)</b>	<u>\$ 10,689</u>	<u>\$ 10,689</u>
<b>Net Income (Loss)</b>	<u><u>\$ (23,474)</u></u>	<u><u>\$ 15,877</u></u>

<sup>1</sup> Revised 2012 Financial Statements adjusted after Data Requests. Revisions provided by Ray L. Jones, Consultant on 10/21/13 and 1/02/14. The Overall impact due to corrections is \$39,351.

**Sunrise Water Company**  
Docket No. W-02069A-13-0261  
Application For Financing

Schedule TBH-3

**LOAN DATA:**

Loan Amount Requested	755,000		
Down Payment:	\$0		
Amount Financed:	\$755,000		
Number of years:	20	Compounding Periods:	12
Interest rate (r):	4.50%	APR:	4.59%

**LOAN AMORTIZATION SCHEDULE**

Period	Loan payment (1)	Beginning- of-month principal (2)	Payments		End-of-month principal [(2) - (4)] (5)	Annual Interest (6)	Annual Principal (7)	Annual Debt Payment (8)
			Interest [ r * (2)] (3)	Principal [(1) - (3)] (4)				
1	\$4,776.50	\$755,000.00	\$2,831.25	\$1,945.25	\$753,054.75			
2	4,776.50	753,054.75	2,823.96	1,952.55	751,102.20			
3	4,776.50	751,102.20	2,816.63	1,959.87	749,142.33			
4	4,776.50	749,142.33	2,809.28	1,967.22	747,175.11			
5	4,776.50	747,175.11	2,801.91	1,974.60	745,200.52			
6	4,776.50	745,200.52	2,794.50	1,982.00	743,218.51			
7	4,776.50	743,218.51	2,787.07	1,989.43	741,229.08			
8	4,776.50	741,229.08	2,779.61	1,996.89	739,232.19			
9	4,776.50	739,232.19	2,772.12	2,004.38	737,227.81			
10	4,776.50	737,227.81	2,764.60	2,011.90	735,215.91			
11	4,776.50	735,215.91	2,757.06	2,019.44	733,196.46			
12	4,776.50	733,196.46	2,749.49	2,027.02	731,169.45	33,487.48	23,830.55	57,318.03

**Sunrise Water Company**  
Docket No. W-02069A-13-0261  
Application For Financing

Schedule TBH-4

**LOAN DATA:**

Loan Amount Requested	755,000		
Down Payment:	\$0		
Amount Financed:	\$755,000		
Number of years:	20	Compounding Periods:	12
Interest rate (r):	6.50%	APR:	6.70%

**LOAN AMORTIZATION SCHEDULE**

Period	Loan payment (1)	Beginning- of-month principal (2)	Payments		End-of-month principal [(2) - (4)] (5)	Annual Interest (6)	Annual Principal (7)	Annual Debt Payment (8)
			Interest [ r * (2)] (3)	Principal [(1) - (3)] (4)				
1	\$5,629.08	\$755,000.00	\$4,089.58	\$1,539.49	\$753,460.51			
2	5,629.08	753,460.51	4,081.24	1,547.83	751,912.67			
3	5,629.08	751,912.67	4,072.86	1,556.22	750,356.46			
4	5,629.08	750,356.46	4,064.43	1,564.65	748,791.81			
5	5,629.08	748,791.81	4,055.96	1,573.12	747,218.69			
6	5,629.08	747,218.69	4,047.43	1,581.64	745,637.04			
7	5,629.08	745,637.04	4,038.87	1,590.21	744,046.83			
8	5,629.08	744,046.83	4,030.25	1,598.82	742,448.01			
9	5,629.08	742,448.01	4,021.59	1,607.48	740,840.53			
10	5,629.08	740,840.53	4,012.89	1,616.19	739,224.34			
11	5,629.08	739,224.34	4,004.13	1,624.95	737,599.39			
12	5,629.08	737,599.39	3,995.33	1,633.75	735,965.64	48,514.57	19,034.36	67,548.93



## MEMORANDUM

DATE: January 13, 2014

TO: Teresa B. Hunsaker  
Public Utilities Analyst II

FROM: Michael Thompson *MSI*  
Water/Wastewater Engineer

RE: Sunrise Water Company  
Application for Financing Approval  
Docket No. W-02069A-13-0261

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### **Introduction and Background**

On July 31, 2013, Sunrise Water Company ("Sunrise" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") requesting authorization to incur long term debt from the Water Infrastructure Finance Authority of Arizona ("WIFA") in an amount of \$755,000 ("Financing Application"). Proceeds from the loan would be used to fund the construction of planned improvements at their Well No. 2 and Well No. 4 Booster Pump Station Sites.

Sunrise is a Class B water utility providing water utility service to approximately 1,450 primarily residential customers<sup>1</sup> located in a service area of approximately 3.9 square miles,<sup>2</sup> in northern Peoria, Maricopa County, Arizona. Sunrises' Certificate of Convenience and Necessity ("CC&N") was granted in Commission Decision No. 40017, dated May 19, 1969.

The water system consists of seven (7) well sites, seven (7) storage tanks, six (6) hydro-pneumatic pressure tanks, twenty-two (22) booster pumps, chlorination systems at each well site, a coin-operated standpipe, 210 fire hydrants, approximately 35.6 miles of Poly Vinyl Chloride ("PVC") water main pipe, and approximately 3.7 miles of Ductile Iron ("DI") water main pipe. Only five (5) of the seven wells are active, providing a combined yield of approximately 1,465 gallons per minute ("gpm"). Well No. 1 is used only as an observation well, and therefore, does not provide water to the system. Well No. 2 is currently out of service, and has been out of service since January 2006, due to the presence of high concentrations of arsenic. The combined storage capacity of the seven (7) storage tanks is 1.231 million gallons.

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<sup>1</sup> At the end of 2012 Sunrise had 1,397 customers. As of July 2013, Sunrise had approximately 1,436 customers, including 1,422 residential customers, 13 commercial customers, and 1 school.

<sup>2</sup> Sunrise's service area is bounded by 99<sup>th</sup> Avenue to the west, Happy Valley Road to the north, 75<sup>th</sup> Avenue to the east, and Williams Road to the south.

The Sunrise water system was visited on August 29, 2013, by Commission Utilities Division Staff ("Staff") member Michael Thompson. Mr. Thompson was accompanied by Sunrise manager, Mr. Marvin Collins. Well Sites No. 2 and No. 4 were of primary interest, and the only sites observed during the visit.

Well Site No. 2 consists of a well, two (2) 100,000 gallon storage tanks, a 5,000 gallon hydro-pneumatic pressure tank, seven (7) booster pumps, and a liquid chlorination system. The well is currently out of service, and has been out of service since January 2006, due to the presence of high concentrations of arsenic. The current U.S. Environmental Protection Agency ("EPA") and Arizona Department of Environmental Quality ("ADEQ") maximum contaminant level ("MCL") for arsenic is 10 parts per billion ("ppb"). According to Sunrise's 2012 Annual Report, the concentration of arsenic in the well is approximately 43 ppb, exceeding the EPA and ADEQ arsenic MCL of 10 ppb. When in service, the well produces water at an approximate rate of 200 gpm. The seven (7) booster pumps include two (2) 20 horsepower ("hp") pumps and three (3) 10 hp pumps that are to be replaced, and two (2) 30 hp pumps that will remain in service. Four (4) of the five (5) booster pumps slated to be replaced are currently in service. The out-of-service booster pump, (10 hp pump), is in need of repair. However, Sunrise has chosen not to repair the pump since they anticipate replacing all five (5) booster pumps. The well site has ample unused space that can be utilized for the improvements.

Well Site No. 4 consists of a well, a 100,000 gallon storage tank, a 5,000 gallon hydro-pneumatic pressure tank, three (3) booster pumps, and a liquid chlorination system. The well produces water at an approximate rate of 240 gpm, and has an arsenic concentration below the MCL of 10 ppb. Sunrise has indicated that the 100,000 gallon storage tank is inadequate to meet current and future customers, and fire flow demands (1,750 gpm for a duration of 2 hours ("hr")). The storage requirement to meet the fire flow demand alone is 210,000 gallons. An additional 250,000 gallons of storage is slated to be installed at the site to provide the storage necessary to meet the current customer and fire flow demands. The well site has ample unused space that can be utilized for the installation of the storage tank.

According to Sunrise's 2012 Annual Report, their customer base increased approximately 3.7 percent. From December, 2012 to May, 2013, their customer base increased an additional 2.8 percent.

In 2012, Sunrise pumped approximately 433,911,700 gallons of water and sold approximately 388,657,241 gallons of water, for a water loss percentage of 10.4. During their peak month, July of 2012, Sunrise reported having 1,356 customers and selling 52,892,155 gallons of water. Their average daily demand for the month of July was calculated at 1,706,199 gallons/day.

## Construction Projects and Cost Estimates to be Financed

Proceeds from the WIFA loan would be used to fund the construction of the proposed improvements at Well Site No. 2 and Well Site No. 4. Improvements at Well Site No. 2 include the construction of an arsenic treatment system, and the installation of two (2) new 30 hp booster pumps with Variable Speed Drives ("VFD"). The new booster pumps will replace five (5) existing booster pumps, which include three (3) 10 hp booster pumps and two (2) 20 hp booster pumps. The improvement at Well Site No. 4 includes the installation of a 250,000 gallon storage tank.

The table below lists Sunrise's proposed plant additions and associated costs<sup>3</sup>. Staff concludes that the cost estimates listed appear to be reasonable and their associated plant additions appropriate. However, no "used and useful" determination of the proposed plant was made, and no particular future treatment should be inferred for rate making or rate base purposes.

### Well No. 2 and Well No. 4 Site Improvements

Project Description	Company Proposed Costs to be Financed (\$)	Staff Recommended Costs to be Financed (\$)
<b>Well No. 2 Improvements</b>		
Engineering (Completed)*	28,500	28,500
Permitting and Construction Services	9,000	9,000
<b>Arsenic Treatment</b>		
<i>Treatment Equipment (two (2) vessel absorptive media)</i>	225,000	225,000
<i>Piping and Installation</i>	56,000	56,000
<i>Electrical Controls</i>	5,000	5,000
<b>Total Arsenic Treatment</b>	<u>286,000</u>	<u>286,000</u>
<b>Booster Pump Replacements</b>		
<i>Two (2) Skid Mounted Pumps with VFD and Piping</i>	46,000	46,000
<i>Electrical Controls</i>	15,000	15,000
<b>Total Booster Pump Replacements</b>	<u>61,000</u>	<u>61,000</u>
<b>Total Well No. 2 Improvement Costs - Engineering Costs</b>	<u>356,000</u>	<u>356,000</u>
<b>Well No. 4 Improvements</b>		
Engineering, Permitting, and Construction Services	20,000	20,000
<b>Storage Tank Installation</b>		
<i>250,000 Gallon Steel Tank</i>	275,000	275,000
<i>Tension Ring Foundation</i>	18,000	18,000
<i>Piping and Installation</i>	20,000	20,000
<b>Total Storage Tank Installation</b>	<u>313,000</u>	<u>313,000</u>
<b>Total Well No. 4 Improvement Costs</b>	<u>333,000</u>	<u>333,000</u>
<b>Contingencies</b>	<u>66,000</u>	<u>66,000</u>
<b>Total Estimated Costs - Well No. 2 Engineering Costs</b>	<u>755,000</u>	<u>755,000</u>

\*Note: Well No. 2 Engineering included the planning and design of the proposed improvements. Engineering costs, (\$28,500), were funded from a grant issued by WIFA, and therefore were not included in the total estimated costs.

<sup>3</sup> See Financing Application Page 2, Paragraph 6 & 7, and Exhibit A. The original total estimated costs were \$783,500. However, since Well No. 2 Engineering costs were funded from a WIFA grant, Sunrise is requesting only \$755,000 to fund the project improvements.

With a customer base of 1,450 customers, Staff concludes that the Sunrise water system has a water production shortfall of approximately 103 gpm. Staff further concludes that Well No. 2, if made operational (i.e. installation of an arsenic treatment system), could meet the current production shortfall and any reasonable future demands. Staff also concludes that the installation of an additional 250,000 gallons of storage, at Well Site No. 4, would provide the storage necessary to meet the current customer and fire flow demands.

Staff recommends that Sunrise file with Docket Control, as a compliance item in this docket, by June 30, 2016, a copy of the Maricopa County Environmental Services Department ("MCESD") Certificate of Approval of Construction ("AOC") for the Well No. 2 and Well No. 4 site improvements.

#### **Arizona Department of Environmental Quality ("ADEQ") Compliance Status**

ADEQ and MCESD regulate the water system operated by Sunrise under ADEQ Public Water System ("PWS") ID No. 07-070. According to the MCESD Drinking Water Compliance Status Report, dated August 21, 2013, the Sunrise water system has no major deficiencies and is delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

#### **Arizona Corporation Commission ("ACC") Compliance Status**

Staff has determined that Sunrise is currently in compliance with Commission requirements.

#### **Arizona Department of Water Resources ("ADWR") Compliance Status**

Sunrise's service area is located within the ADWR Active Management Area. As of August 26, 2013, Sunrise was non-compliant with departmental requirements governing water providers and/or community water systems. According to ADWR's Water Compliance Report ("WCR"), Sunrise's lost and unaccounted for water in 2012 was 11.16 percent, and has been greater than 10 percent for the past three (3) years, averaging 11.23 percent<sup>4</sup>. The WCR compliance requirement stipulates that lost and unaccounted for water should be less than 10 percent of the total use for large water providers. ADWR is currently in the process of arranging a meeting with Sunrise to discuss efforts for Sunrise to achieve compliance with respect to lost and unaccounted for water. According to Sunrise, its lost and unaccounted for water is currently at 9 percent.

Staff recommends that Sunrise file with Docket Control no later than June 30, 2014, twelve (12) months of actual water use data. If the reported water loss is greater

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<sup>4</sup> The Sunrise Lost and Unaccounted for water figures are based on ADWR's calculation method and requirements.

than 10 percent, Sunrise should prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If Sunrise believes it is not cost effective to reduce the water loss to less than 10 percent, Sunrise should submit a detailed cost benefit analysis to support its opinion. In no case shall Sunrise allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, should be docketed as a compliance item no later than August 31, 2014.

### **Conclusions and Recommendations**

Staff has determined that Sunrise is currently in compliance with Commission requirements.

ADEQ and MCESD have reported that Sunrise has no major deficiencies and is delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

ADWR has reported that Sunrise is currently non-compliant regarding lost and unaccounted for water.

Staff concludes that the Sunrise water system has a water production shortfall of approximately 103 gpm. Staff further concludes that Well No. 2, if made operational (i.e. installation of an arsenic treatment system), could meet the current production shortfall and any reasonable future demands.

Staff concludes that the installation of an additional 250,000 gallons of storage, at Well Site No. 4, would provide the storage necessary to meet the current customer and fire flow demands.

Staff concludes that the Sunrise's cost estimates for the proposed well site improvements to be "Financed", totaling \$755,000, appear to be reasonable and their associated plant additions appropriate. However, no "used and useful" determination of the proposed plant was made, and no particular future treatment should be inferred for rate making or rate base purposes.

Staff recommends that Sunrise file with Docket Control, no later than June 30, 2014, twelve (12) months of actual water use data. If the reported water loss is greater than 10 percent, Sunrise should prepare a report containing a detailed analysis and plan to reduce the water loss to 10 percent or less. If Sunrise believes it is not cost effective to reduce the water loss to less than 10 percent, Sunrise should submit a detailed cost benefit analysis to support its opinion. In no case shall Sunrise allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, should be docketed as a compliance item no later than August 31, 2014.

Staff recommends that Sunrise file with Docket Control, as a compliance item in this docket, by June 30, 2016, a copy of the Maricopa County Environmental Services Department ("MCESD") Certificate of Approval of Construction ("AOC") for the Well No. 2 and Well No. 4 site improvements.